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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,404	07/09/2003	Atsushi Onoe	4105-20	7950

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EXAMINER

DINH, TAN X

ART UNIT	PAPER NUMBER
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2653

DATE MAILED: 03/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/615,404	Applicant(s) ONOE ET AL.	
	Examiner TAN X. DINH	Art Unit 2653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25 is/are allowed.
- 6) ☒ Claim(s) 26-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1) The amendment filed 1/09/2006 is acknowledged. Claims 1-24 have been canceled. New claims 25-33 are currently been added.

2) The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the following features must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

“ the tracks including a first track, a second track and a third track, the first track, the second track and the third track being located such that the first track is sandwiched between the second track and the third track, the pit for tracking being recorded on the first track, a plurality of pits polarized in a positive direction and a plurality of pits polarized in a negative direction being alternately arranged on each of the second track and the third track, each of the plurality of pits on the second track and each of the plurality of pits on the third track being located so as to face each other, a polarization direction being different between each of the plurality of pits on the second track and each of the plurality of pits on the third track which face each other ” (claims 28,30 and 32).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application.

Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even

if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d).

If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3) Claims 28,30-33 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The original disclosure fails to specify the features of " the

Art Unit: 2653

tracks including a first track, a second track and a third track, the first track, the second track and the third track being located such that the first track is sandwiched between the second track and the third track, the pit for tracking being recorded on the first track, a plurality of pits polarized in a positive direction and a plurality of pits polarized in a negative direction being alternately arranged on each of the second track and the third track, each of the plurality of pits on the second track and each of the plurality of pits on the third track being located so as to face each other, a polarization direction being different between each of the plurality of pits on the second track and each of the plurality of pits on the third track which face each other ” as now claimed in claims 28,30 and 32. These features are considered to be new matter.

4) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5) This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the

obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6) Claims 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over KASANUKI et al (5,481,527).

KASANUKI et al discloses a dielectric recording medium, as claimed in claim 26, comprises a substrate (Fig.1, 5 and figure 5d, 51), an electrode disposed on the substrate (Fig.1, electrode layer 4), a dielectric material disposed on the electrode, wherein polarization directions of the dielectric material are set so as to be aligned in predetermined directions (Fig.2, ferroelectric layer 3, polarization direction 22), except to specifically show a pit for tracking in the control area. It would have been obvious to someone within the level of skill in the art at the time of the invention was made to have a tracking pit in the control area of KASANUKI et al's disk. The rationale is as follows:

Control area is old and widely used in the recording art, for example, control area can be located in sector header of the storage disk which includes tracking servo pits for controlling the tracking during recording or reproducing process (See US 6,965,545, HINO et

al's abstract; See US 6,510,130, HAYASHI et al's abstract, figure 3, tracking pits Ptrk at servo region (servo header); See US 5,914,920, YOKOGAWA's abstract and US 5,646,932, KURIBAYASHI et al's abstract and figure 5, tracking pit area ATR with tracking pits TP1, TP2 and TP3, etc.,). Therefore, one of ordinary skill in the art at the time of the invention was made would have been motivated to use a tracking pit in the control area of KASANUKI et al's ferroelectric recording medium for controlling the tracking as claimed.

As to claim 27, the features of laying out the recording disk into recording area between an inner area and outer area are old and widely used in the recording art (See US 6,965,545, HINO et al's figure 1B, data area 101 between inner area and outer area).

As to claim 29, the features of dividing the recording area into a plurality of zones and tracking the pits are located in each of the plurality of zones are also old and well known in the disk recording art (See US 6,965,545, HINO et al's figure 1B, the tracking pits are recorded in every sector header region 101).

7) Claim 25 is allowed.

8) Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2653

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9) The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(see form PTO-892 attached herein).

Applicant is reminded that in amending in response to a rejection of claims (if the rejection involves with any applicable arts) the patentable novelty must be clearly shown in view of the state of the art disclosed by the references cited and the objection made. Applicant *must also show how the amendments avoid such references and objections.* See 37 CFR § 1.111(c).

10) Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAN Xuan DINH

whose telephone number is (571) 727-7586. The examiner can normally be reached on MONDAY to FRIDAY from 8:00AM to 5:30PM.

The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



TAN DINH
PRIMARY EXAMINER

March 15, 2006